

HAN



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/611,108

07/06/2000

Jose Uemura

2705-107

4929

7590

02/24/2005

Marger Johnson & McCollom PC
1030 SW Morrison Street
Portland, OR 97205

EXAMINER

PIZARRO, RICARDO M

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 02/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/611,108

Applicant(s)

UEMURA ET AL.

Examiner

Ricardo Pizarro

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-54 is/are allowed.
- 6) ☒ Claim(s) 1,2,6-8,15-16, 18 and 22-23, -25 is/are rejected.
- 7) ☒ Claim(s) 3-5,10-14,17,19-21,24 and 26-28 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 15-16, 18, 22, 23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Hughes.

Regarding claims 15 and 22, Hughes discloses a transmission control unit 106 in Fig. 1 (an event manager) said control unit maintains a service queue in Fig 2 including elements 244 and 246, col 8 lines 30-33 (comprising an event queue adapted to queue a plurality of event signal) ; control unit 106 and service queue in Fig. 2, col 8 lines (the event manager comprising an event queue adapted to queue the plurality of signals) and index devices 210 and 212 that will indicate new or current entry status , col 8 lines 14-16 (a status register adapted to maintain a status of the queue).

Regarding claims 16 and 23, Hughes discloses a circular queue (calendar queue)

Regarding claims 18 and 25 , Hughes discloses pointers 244 and 246 in Fig. 2, col 8 lines 31-33 (wherein the event manager includes an event read and write pointers).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 6- 8 are rejected under 35 U.S.C. 103(a) over US patent No. 5,835,494 (Hughes) in view of US patent No. 5,917,815 (Byers).

Regarding claim 1, Hughes discloses a multi-level scheduler comprising a plurality of calendar devices including circular queues 112 and 114 In Fig. 2 (plurality of farm devices) each entry in each of the calendar queues 112 and 114 corresponds to a desired service time, Control unit 106 schedules the service time of a virtual connection for a particular cell slot by placing the virtual connection in a linked list associated with a calendar entry that corresponds to the cell slots, page 6 lines 31-35 (said farms adapted to generate a corresponding plurality of signals responsive to a corresponding plurality of signaling events), control unit 106 for the circular calendar queues is shown in Fig. 1 , col 5 lines 65 (an event manager adapted to sequence the plurality of event signals), as in claim 1.

Regarding claim 6, Hughes discloses control unit 106 and service queue in Fig. 2, col 8 lines (the event manager comprising an event queue adapted to queue the plurality of event signals) a next connection table that includes entries 248 that comprises both head and tail pointers 244 and 246, col 8 lines 37-41 (and a status register adapted to maintain a status of the event queue).

Regarding claim 7 , Hughes discloses a circular queue (calendar queue).

Regarding claim 8, Hughes discloses that the control unit will read each connection id at the head of a queue, col 9 lines 13-14 (event manager comprises an event register to read the event queue)

Hughes did not specifically disclose said farms being frame farms, as in claim 1 ,

Art Unit: 2661

a plurality of framers adapted to receive corresponding plurality of digital signals and extract corresponding signaling data and generate a corresponding event signal responsive to the signaling data, a signaling queue adapted to queue the signaling data, a signal register adapted to read the signaling queue, as in claim 2;

Byers discloses an Integrated telecommunications signaling network comprising a device including a plurality of framers (DS1 Framers 88 in Fig. 4) adapted to receive corresponding plurality of digital signals (serial streams are delivered to the DS1 framers via interface 86, page 4 line 55-57) and extract corresponding signaling data (framers extract from each DS1, page 4 line 64) and generate a corresponding event signal responsive to the signaling data (signals are then transmitted, page 5 line 3), a signaling queue adapted to queue the signaling data (signaling queues 84 in Fig. 4, a signal register adapted to read the signaling queue (DS1 interface 86 in Fig. 4 will "read" streams going to DS1 framers 88), as in claim 2;

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the plurality of framer devices as disclosed by Byers to the circular queuing system disclosed By Hughes to obtain a system that can process using a standard interface provided by standard time division digital signal carrier DS1 into a virtual tributary group for transmission to the field elements.

Allowable Subject Matter

3. Claims 29-54 are allowed.

Art Unit: 2661

Claims 3-5,9-14, 17, 19-21, 24, 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Please notice objection to claims under 37 CFR 1.75.

Conclusion

4. Applicant's arguments with respect to claims 1-2, 6-8 have been considered but are moot in view of the new ground(s) of rejection.

Regarding claim 15 applicant argues that Hughes does not disclose a status register adapted to maintain a status of the signals. Examiner disagrees since Hughes discloses a next connection table 116 that updates entries 248 provided by head pointer 244 and tail pointer 246, page 8 lines 34-40.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306

(for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 220 South 20th Street, Crystal Plaza Two, Lobby, Room 1B03, Arlington, Va 22202 (Customer Window).

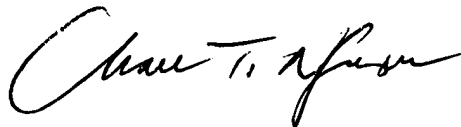
Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (571) 272-3077. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. The fax number for this Group is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Chau Nguyen** can be reached on (571) 272-3126.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2/14/2005

Ricardo M. Pizarro



CHAU NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600